

SAN DIEGO COUNTY OFFICE OF EDUCATION
Personnel Commission

CLASS TITLE: SENIOR SYSTEMS AND PROGRAMMING ANALYST, Grade 71

DEFINITION:

Under minimal supervision, monitors, analyzes, develops, maintains and enhances comprehensive computer applications used by the SDCOE and school districts; analyzes and develops new or modified procedures as mandated and requested; researches new technologies/concepts; initiates and conducts feasibility studies; designs and tests models, and develops and sets associated standards; assists in the coordination and facilitation of complex team projects; acts as a resource regarding a comprehensive SDCOE information system and its associated subsystems.

REPRESENTATIVE DUTIES:

This position description is intended to describe the general nature and level of work being performed by the employee assigned to the position. This description is not an exhaustive list of all duties, responsibilities, knowledge, skills, abilities, and working conditions associated with the position. Incumbents may be required to perform any combination of these duties. All requirements are subject to possible modification to reasonably accommodate individuals with a disability.

ESSENTIAL FUNCTIONS:

Researches new technologies/concepts and studies the feasibility of their application to SDCOE systems and programs.

Designs and tests implementation models of the new technologies/concepts.

Develops and sets standards for IMS staff to use in processing data.

Participates in the design and modification of database storage structures.

Assists in planning, organizing, coordinating and overseeing the design, development and implementation of information technology projects for school districts and County Office staff.

Assists in assigning work and monitoring the systems, development, programming or other technical staff to ensure effective and timely project completion.

Facilitates meetings to discuss project progress.

Coordinates walk-throughs and attends program reviews.

Monitors testing and troubleshoots problems.

Provides training and acts as a resource for other programming staff regarding a comprehensive information system and its associated subsystems.

Provides user training.

Consults with state, county, district and school personnel to design new systems, and modify and enhance existing systems with respect to their adaptability to electronic data processing and the desired results.

Monitors and evaluates efficiency of daily application usage and annual and cyclical processes, and initiates improvements as necessary.

Maintains current knowledge of applicable rules, laws and regulations, and formulates computer systems requirements based on legal, mandated and requested changes.

Participates in the design and modification of forms, records and reports and the revision of existing related materials in use by supported network applications.

Develops conceptual and detail specifications for new and existing systems and structured programs.

Prepares system-level and client program documentation.

Codes program instructions in applicable language such as COBOL or Visual Basic.

Coordinates structured system tests.

Audits test results and corrects system and program logic errors.

Designs input and output formats and forms.

Prepares and maintains system and program history data.

Consults with supervisors, other staff members, operations personnel and clients in arriving at solutions to programming and system design problems.

Supervises and participates in program modifications.

Prepares instructions and manuals for users.

Initiates and conducts feasibility studies.

NON-ESSENTIAL FUNCTIONS:

Performs related duties as assigned.

CREDENTIALS, CERTIFICATES, LICENSES OR OTHER REQUIREMENTS:

None

EDUCATION AND EXPERIENCE:

A combination of education, training and experience which would clearly demonstrate possession of the knowledge and abilities detailed above. Depending on assignment an example of a typical qualifying background would include: a minimum of three (3) years of work experience performing comparable duties involving the use of web-based, internet/intranet programming languages, high-level programming languages used by systems in a complex and integrated LAN or WAN environment, and the development of microcomputer applications, AND completion of college-level course work in information systems, computer science or closely related field. Ideal candidate will have full-time paid experience in a lead position involved with interfacing network applications to mainframe computers; and/or experience coordinating and facilitating solutions requiring a team effort.

KNOWLEDGE AND ABILITIES:

KNOWLEDGE OF:

Thorough knowledge of:

Principles and techniques of structured systems design and structured computer programming as they pertain to both mainframe and microcomputer platforms

COBOL, Visual Basic and other appropriate programming languages

Database storage and access

Network communications

Knowledge of:

Adobe Dreamweaver and Photoshop, SQL Enterprise Manager, Visual Studio, Remote Desktop, Unisys A series mainframe computer systems, MCP operating system, LINC, Progeni, COMS, Windows NT, HTML, ASP, ASP.net, and SQL is highly desirable

ABILITY TO:

Research new technologies/concepts and conduct feasibility studies

Design and test implementation models and develop associated standards

Apply principles of information management to a variety of application problems

Design cost-effective systems and programs using database and network access techniques

Be efficient, accurate and thorough in the preparation of systems and program documentation

Analyze and solve problems in program logic and machine operations

Maintain current knowledge of technological advances in the information technology field

Coordinate and facilitate complex information technology projects

Communicate effectively orally and in writing

Work independently, as a team leader and as a member of a team

Establish and maintain effective working relationships with those contacted in the course of work

Depending on assignment

Organize and prioritize work

Exercise appropriate judgment in making decisions

Maintain confidentiality of information

Demonstrate attendance sufficient to complete the duties of the position as required

WORKING CONDITIONS & PHYSICAL ABILITIES:

Duties are performed in an office setting.

Must be able to hear and speak to exchange information; see to perform assigned duties; sit for extended periods of time; possess dexterity of hands and fingers to operate a computer keyboard and other equipment; kneel, bend at the waist, and reach overhead, above the shoulders and horizontally, to retrieve and store files; lift light objects.

DISTINGUISHING CHARACTERISTICS:

The Senior Systems and Programming Analyst is distinguished from the Programmer/Systems Analyst II in that the former not only performs senior-level systems analysis and programming in the design, development and implementation of complex computer applications, but also spends a significant amount of time researching and evaluating new technologies/concepts and developing and testing models and associated standards for other IMS staff to use in processing data. The Senior Systems and Programming Analyst may also assist in planning, organizing and

overseeing the design, development and implementation of complex information technology projects. The Senior Systems and Programming Analyst provides training and acts as a resource for other programming staff regarding a comprehensive system (e.g., payroll, SIS, FACS) and its associated subsystems.

Established: 07/99

Revised: 05/00, 2008, 6/13

Established	Approved by the Personnel Commission	Revised	FLSA Status	Job Code	Salary Grade
7/99	7/99	5/00; 2008; 6/13	Non-Exempt		71